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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/609,103

06/26/2003

Mark A. Trautman

42P15276

9235

8791

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03/15/2005

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EXAMINER

THOMPSON, GREGORY D

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/609,103

Applicant(s)

TRAUTMAN ET AL.

Examiner

Gregory D. Thompson

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,9,10,12,17,18 and 22 is/are rejected.
- 7) ☒ Claim(s) 3,5-8,11,13-16,19,21,23-31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 5, 7, 8 are objected to because of the following informalities: lines 2, 1, 4; respectively language of "the insets" not consistent with language of "at least one...insert" in claim 1, line 3. Language of at least one can mean one or more than one and language of insets can mean only more than one. Appropriate correction is required.
2. Claims 13, 15 are objected to because of the following informalities: lines 2, 1, respectively language of "inserts" not consistent language with language of "insert" in line 5 of claim 9. Appropriate correction is required.
3. Claims 23, 25, 26 are objected to because of the following informalities: lines 2, 1 and 2; respectively language "inserts" not consistent language with "at least one insert" as discussed above in paragraph 1. Appropriate correction is required.
4. Claims 1-2, 4, 9-10, 12, 17-18 and 22 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Krassowski et al.

The apparatus or system composes a heat sink assembly of a thermally conductive core 32 with component 14 coupled thereto and a thermally conductive frame 34 positioned around the core that defines a cavity or opening to receive core 32. Frame 34 defines at least one opening or groove 35 machined across frame 34 to receive at least one thermally conductive insert or fin 36. The opening or cavity and grooves 36 define an open area or width. The core 32 and frame 34 are monolithic as being a single unit when secured together.

Regarding claims 9-10 and 12, the structure discussed above would met the broad method claim language of providing, positioning and inserting.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4, 9-10, 12, 17-18, 22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Jech et al

The apparatus or system composes a heat sink assembly of a thermally conductive core 14 in fig. 10 thermally coupled to a component or chip and a thermally conductive frame or substrate 12 positioned around the core that defines an opening to receive the core 14 (note col. 9, lines 7-8). Frame 12 defines at least one opening to receive at least one thermally conductive insert 14 in fig. 10. The core 14 and frame 12 are monolithic as being a single unit when secured together.

Regarding claims 9-10 and 12, the structure discussed above would met the broad method claim language of providing, positioning and inserting.

6. Claims 3, 5-8, 11, 13-16 19, 21, and 23-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The cited art does not teach the core composed of a post and base with the base protruding from the frame, the frame includes a frame work of members primary and secondary members, folded fin structure and fan mounted to the heat sink. Krassowski teaches away from the use of a fan for weight concerns.

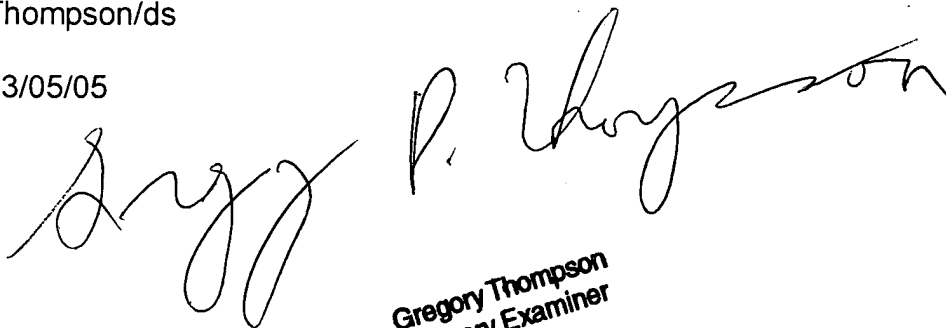
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory Thompson telephone number is (571)272-2045. The examiner can normally be reached on Monday-Thursday from 6:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Field, can be reached on (571) 2727 -2800,ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thompson/ds

03/05/05

A handwritten signature in black ink, appearing to read 'Gregory P. Thompson', is written over a printed name and title stamp.

Gregory Thompson
Primary Examiner